
Animal Evolution. *G. S. Carter.* Sidgwick and Jackson, Limited, London, and Macmillan Co., New York. 1951. xv+368 pp. $4.50.

In part I the author discusses the biological facts of evolution. A scholarly discrimination of the operation of micro-, macro-, and mega-evolution is presented, and a condensed review of modern genetics supplies the proper background for understanding the factors inherent within the evolving animal. The fine distinctions of biological, systematic and paleontological species reveals the mutability of organisms.

Part II expresses the modern version of the Theory of Evolution which must agree with an amassing wealth of facts. Emphasis on recent views of the causes of evolution strikes an argumentative approach backed by scientific rationalization. An insistence on the simultaneous study of all aspects of the animal's natural history, such as ecology, habits, food, responses, and body organization from the egg to the adult, affecting and effecting the individual and species in all its stages interprets the total environment as the prime mover and underlying cause of evolving organism.

A prodigious bibliography of the most advanced publications on evolution is aptly referred to. This book is highly commendable for a study in the coordination of basic causes of Animal Evolution.

G. J. SIEMENS.

Organic Chemistry. *H. J. Lucas.* American Book Company, New York. Second edition, 1953. vi+760 pp. $7.00.

The second edition of Professor Lucas' book follows the same philosophy as the earlier edition in its emphasis on fundamental understanding of organic chemistry in terms of a wider physical picture of structure and properties. One of the questions which occur to a teacher in presenting organic chemistry to a beginning class is just how real to the student are concepts such as resonance and electronic mechanisms. The physical reality of these ideas must be emphasized to give them meaning and significance and to make them more than apparent rationalizations. Perhaps the best way to develop this emphasis is to present the basic experimental background of these concepts to the students, as this book does

Complete coverage and the inclusion of useful descriptive organic chemistry has not suffered from the discussion of the physical aspects. The content is such that the text can be used in any one-year beginning course in organic chemistry.

Because of the importance of physical concepts in appreciating and understanding the new knowledge and thought in organic chemistry, I believe this book is to be highly recommended.

EARL W. MALMBERG.

Embryology. *L. G. Barth.* The Dryden Press, Inc., New York 19, N. Y. Revised edition. 1953. xi+516 pp. $6.00.

This book gives an understandable and accurate presentation of the many aspects of embryology. The text is easy to read and the explanations of the embryological phenomena are mostly non-teleological.

The author has made excellent use of illustrations, diagrams, and charts which are so essential to a good embryology text. This book emphasizes the principles of embryology and is so fundamental in many aspects that it would be both useful and valuable as a college text.

One of the excellent features of the book is the compilation of a series of illustrations of the development of the frog, chick and mammal. These pictures are arranged in such a manner that the developmental stages of one animal can be quickly compared with any of the developmental stages of the others.

WILLARD C. MYSER.
